Socioeconomic Trends in Communities Near Fagatele Bay

Fagatele Bay is a National Marine Sanctuary located on the Island of Tutuila in American Samoa. Although resource extraction and fishing have been regulated in the Sanctuary since 1986, long-term monitoring studies indicate an overall decline in marine resources, particularly large fish species. In the summer of 2008, a socioeconomic survey was conducted of all the residents in the villages adjacent to the sanctuary (Futiga, Taputimu, Vailoatai, and Vaitogi). The objectives of this study were to gather socioeconomic information to better inform sanctuary staff for the Management Plan Review (MPR) process, support site selection for a National Marine Sanctuary Network, and identify target groups for education and outreach programs. The survey included questions about sources of coral reef information, resource use trends, and community perceptions of resource regulations. The following information was gathered in the survey:

I. Value of Coral Reefs

It is important to know why people perceive coral reefs as valuable. The responses help direct education and outreach efforts by identifying key knowledge gaps. An overwhelming majority of people who responded to the survey indicated that coral reefs are valuable to provide shelter for marine life (81%). Many respondents also recognized the provision of food (72%), protection from storms and waves (72%), and scientific research (61%) as valuable contributions of coral reef ecosystems. Fewer respondents noted sand production (53%), the economy (50%), culture (48%), and tourism (47%).

II. Threats to Fagatele Bay Ecosystems

It is also important to know what people perceive as threats to coral reef ecosystems. If people do not perceive an activity as a threat, they are unlikely to do anything to modify their behavior. Respondents were shown a list of activities and asked whether they perceived the activity to be a significant threat, a mild threat, or not a threat to the environment. Most people identified most activities as either significant threats or mild threats. However more people identified communal pollution sources including runoff from the dump (89%), marine

debris (86%), and sewage outflow (84%), as significant threats. Individual activities such as dredging (81%), sand mining (78%), destructive fishing (78%), and over-fishing (59%) were still seen as threats but to a lesser degree. In addition, some respondents (75%) identified population growth as a significant threat to Fagatele Bay.



V. Fishing Activity in Fagatele Bay

Approximately one in every nine people surveyed has fished or harvested marine species in Fagatele Bay in the past five years. Half of the people who claim to fish in Fagatele Bay fish more than once a week. A majority of the people who responded to the survey (82%) use a fishing rod; 90% to catch reef fish and 85% to feed themselves and their families.

Approximately half of the people surveyed who fish in Fagatele Bay have sold their catch (48%). According to survey results, illegal fishing, including the use of destructive fishing methods, continues to be practiced along the reef within the Sanctuary.

IV. Regulations in Fagatele Bay

For coral reef management to be effective, it is essential that people are aware of the regulations that restrict activities in Fagatele Bay. However, only one in five people who were surveyed indicated that they were aware of any regulations. A majority of the respondents either indicated that there were no regulations (57%) or that they were not sure



(23%). It should be noted that a greater percentage of people surveyed who fished in Fagatele Bay in the past five years were aware of the regulations (44%) than people who did not fish in Fagatele Bay (17%). The fact that people were aware of the regulations and continued to fish anyhow suggests that there is a need for increased enforcement.

V. Conservation in Fagatele Bay

Although most people in the survey were unaware of regulations in Fagatele Bay, 44% of those surveyed thought that there should be regulations in Fagatele Bay. In addition, very few people stated that they were completely opposed to regulations (12%). The fact that most people are unsure about whether there should be regulations (45%), indicates that education and outreach programs could potentially convince people of the merits of

marine protection. A greater percentage of people surveyed who have been fishing in Fagatele Bay in the past five years think that there should be regulations (64%) than people who have not been fishing in Fagatele Bay (42%). It is not clear why fisherman expressed this preference but one reason could be because they recognize a decline in fish populations and see a need to enhance management efforts.

Most of the people who were surveyed in the villages adjacent to Fagatele Bay recognize the value of coral reefs and understand some of the threats to coral reef ecosystems. In addition, the respondents recognize the value of protecting the reefs, however most people are not aware that the reef is already protected.



Where can I get more information?

For more information, please visit our website at: http://fagatelebay.noaa.gov/ or contact your local sanctuary office at:

Gene Brighouse, Superintendent

Fagatele Bay National Marine Sanctuary Convention Center, Utulei Pago Pago, AS 96799

Phone: 684-633-7792 Fax: 684-633-4195

Email: Gene.Brighouse@noaa.gov

Kevin Grant, Deputy Superintendent

Fagatele Bay National Marine Sanctuary Convention Center, Utulei Pago Pago, AS 96799

Phone: 808-397-2660 ext. 238

Fax: 808-397-2662

Email: Kevin.Grant@noaa.gov



